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ABSTRACT

This monograph addresses the recruitment and retention of Hispanic-Americans in University Affiliated Programs (UAP), which train personnel for the provision of health, education, and social services to people with developmental disabilities. It is designed to assist UAP faculty and staff to develop a comprehensive plan to increase the participation of Hispanic-Americans. The monograph discusses ethnic identifiers and cultural terms of reference, demographics of the Hispanic population, educational experiences of Hispanics, and Hispanic underrepresentation in the health and social sciences. A number of model strategies for recruitment and retention are described, including institutional commitment and leadership, faculty commitment and sensitivity, recruitment of minority faculty, and parental involvement. Final sections discuss program evaluation and monitoring and present summary implications for UAPs. Appendices contain a list of 55 references; a bibliography of 19 additional items; a list of Hispanic higher education associations and related organizations; and descriptions of model programs in the areas of intervention, organization, and speech/language pathology and audiology with a bilingual emphasis. (JDD)

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# Recruitment & Retention OF MINORITY TRAINEES

## in University Affiliated Programs

EC233248

HISPANICS

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# THE RECRUITMENT AND RETENTION OF MINORITY TRAINEES IN UNIVERSITY AFFILIATED PROGRAMS

## HISPANICS

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## FOREWORD

This monograph is one of a four-part series on the recruitment and retention of minority trainees in University Affiliated Programs (UAPs). Each monograph discusses the social issues and strategies related to the recruitment of a particular minority population; Hispanics, African-Americans, Asian-Americans, and Native American Indians.

The monographs were developed as part of a consortium initiative that involved the UAPs at Birmingham, Alabama; Omaha, Nebraska; Portland, Oregon; Vermillion, South Dakota; Dallas, Texas; and Madison, Wisconsin and the American Association of University Affiliated Programs (AAUAP). The consortium initiative was supported in part through a grant from the Administration on Developmental Disabilities (ADD), Office of Human Development Services. Other products developed through the ADD grant to the consortium include brochures, posters, bookmarks, and a video-tape that can be used by all UAPs and their affiliating universities to recruit minority students. In addition, a national conference was held in June 1990 at Madison, Wisconsin to design operational plans for ten UAPs across the country to recruit and retain minority trainees. These operational plans will guide the development and implementation of a state-wide recruitment endeavor that will be done through collaboration with each UAP's affiliating university, feeder colleges, and/or state agencies. All of the products developed through the project and the conference report will be disseminated to every UAP in the network.

The purpose of the monograph series is to provide information and resources that can be used by the faculty and staff at each UAP to develop a comprehensive plan to recruit and retain minority students for their UAP training programs. It is expected that this series also will be a useful guide for the faculty and staff of each UAP's affiliating university and feeder colleges and for the policy-makers and administrators of the state agencies that are responsible for the provision of services to people with developmental disabilities.

The need for increased numbers of minority trainees in our UAP training programs is obvious. There is a growing and endemic personnel shortage within the health, allied health, social and education professions across the country. Furthermore, it is anticipated that about 500,000 higher-education faculty will have to be replaced by the year 2005 (Bowen and Schuster, 1986). As the supply of students decreases, the demographics of the U. S. population also is changing. The predicted rate of growth within the U. S. for the majority population is 3.2 percent; whereas the growth rate for all minority populations is 12.3 percent (U. S. Bureau of Census, 1989). Given the changing demographics of the country, the greatest resource potential for meeting personnel needs in the future will be the recruitment and retention of minority trainees.

At this point in history, the participation of minority faculty and students in the field of developmental disabilities is a matter of survival for the UAP training programs and a matter of whether health, education and social services will be available to both minority and non-minority people with developmental disabilities in future generations. The altruistic goals of some social activists to increase the participation of minorities in academia and the service professions is an anachronism. Today, the participation of minority faculty and health professions is a matter of economic necessity.

Today's UAP graduates live and work in a world that has become a global village, and the ability to work with and to serve people from different cultural heritages ia a necessary tool for all service providers, policy-makers, teachers, and researchers. When our UAP training programs emphasize an Anglo-American perspective instead of cultural diversity, both the majority and the minority trainees receive inadequate training to provide direct-care services and to provide leadership among health, education, and social service professionals regarding issues related to developmental disabilities.

The monographs will assist UAP faculty and staff to develop a comprehensive plan to increase the participation of minority faculty and trainees within their UAP training programs. Each monograph provides information regarding the demographics and educational experiences of a particular minority population and a discussion of exemplary strategies and programs to recruit those students into colleges. The series of monographs reflects the ethnic diversity among minority populations within this country.

Each monograph was developed with the advice and guidance of an advisory committee that was comprised of professionals in education and/or health who were members of the minority populations addressed by the monograph. Committee members helped to design the monograph and to maintain the integrity of the information discussed.

As the editor of this series, I want to express my sincere appreciation to the authors for their outstanding efforts and endurance, to the people who worked with us as advisors to the project, and to the administrative and support staff of the Waisman Center UAP for their notable contributions to this undertaking.

Sincerely,

Mariellen Kuehn

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# THE RECRUITMENT AND RETENTION OF HISPANIC TRAINEES IN UNIVERSITY AFFILIATED PROGRAMS

## INTRODUCTION

The Hispanic population within the United States represents approximately eight percent of the total population. In contrast, only two percent of the trainees participating in University Affiliated Programs (UAPs) during 1987 were Hispanic (Smoyer and Jones, 1988). This underrepresentation of Hispanics in UAP training programs is most likely related to the social issues that limit the participation of Hispanic students in educational programs nationally and to a lack of knowledge among UAP faculty of exemplary recruitment and retention programs that could be adapted and used within UAPs.

It is evident from the data presented in this monograph that the non-participation of Hispanics in undergraduate and graduate programs is a national problem and not one that is restricted to UAPs. The number of Hispanics attending college has declined continually during the last decade, and those students who do attend college are concentrated in community colleges and seldom attend or graduate from four-year institutions (Green, 1989). To increase the number of Hispanic trainees within UAPs, UAP administrators, faculty, and staff will need to expand their knowledge of the economic, social, and cultural barriers within our society that limit the access of Hispanic students to higher education. UAP faculty also will need to extend their recruitment efforts beyond the pool of graduate students that is currently available and involve themselves with intervention programs that have been developed by their affiliating universities to recruit and to retain Hispanic students in baccalaureate and graduate programs.

This monograph is designed to 1) identify the social issues that are barriers to the recruitment and retention of Hispanic students at the undergraduate and graduate level, and 2) describe existing recruitment and retention programs that can serve as models for adaptation by UAPs when designing, developing, implementing, or expanding their recruitment and retention programs for Hispanic students.

## ETHNIC IDENTIFIERS AND CULTURAL TERMS OF REFERENCE

A central issue for demographers, researchers, educators, and other professionals has been to identify a generic term that could be used to reference people of Spanish origin or descent. Examples of different terms that are used include Hispanic, Latin American, and Latino. Most of these terms are unacceptable to some segment of the ethnic group because of the historical, political, or social connotations associated with the term.

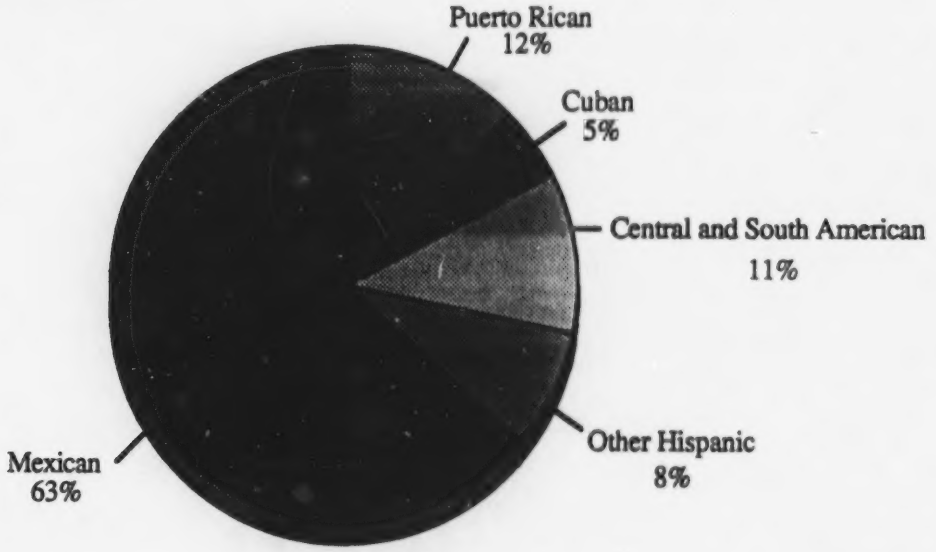
The term Hispanic, which is used in this monograph, was created by the U.S. Bureau of the Census (COSSMHO: The National Coalition of Hispanic Health and Human Service Organizations, 1988). In the past, the U.S. Bureau of the Census has used two data collection methods to identify those people to be counted among the Hispanic population. The first method was to designate the speaking of Spanish or a Spanish surname as identifiers. The second method was to ask individuals to identify their origin. The use of the Spanish language as an identifier resulted in the inclusion of persons of Mexican, Central and South American, Cuban, Puerto Rican, Dominican, Spanish, and even Filipino origins. The use of Spanish surnames resulted in Anglo spouses being included among Hispanics in the census data and individuals being excluded who had married and relinquished their Hispanic surnames (Schreiber, 1981). The 1990 census questionnaires will ask if the person is of Spanish/Hispanic origin, and if the answer is "yes" the respondent will be asked to indicate a specific subgroup. The subgroups identified are 1) Mexican, Mexican-American, Chicano, 2) Puerto Rican, 3) Cuban, or 4) other Spanish/Hispanic, with the request that a specific nationality group be printed in the space provided.

This lack of consensus regarding terminology demonstrates the difficulties inherent in any generalized approach to this population as a collectivity. Since no satisfactory solution to the problem of terminology appears to exist at present, the term Hispanic will be used as a generic reference. The terms Mexican American, Mainland Puerto Rican, and Cuban American have been adopted as general designations for the sub-groups which are the focus of this monograph.

## DEMOGRAPHICS OF THE HISPANIC POPULATION

Hispanics reside throughout the United States, but 65 percent are concentrated in California, Texas, and New York, and almost 90 percent live in the nine states of Arizona, California, Colorado, Florida, Illinois, New Mexico, New Jersey, New York, and Texas (COSSMHO, 1988). During the past decade, large numbers of Hispanics have immigrated to the United States. The United States Census Bureau recently reported that the number of Hispanics in the United States has grown by 30 percent since 1980 —five times as rapidly as the rest of the population. As of March 1987, the Hispanic population of the United States was 18.8 million, a 4.3 million increase since the 1980 census. This revised estimate places Hispanics at approximately eight percent of the nation's population (U.S. Bureau of the Census, 1988). The proportional distribution of sub-groups within the Hispanic origin population is shown in Figure 1.

Figure 1.
Hispanics, by Type of Origin:
March 1987
(Percent of all Hispanics)




3

Adapted from U.S. Bureau of the Census, 1988

During the five-year period from 1982 to 1987, the highest rate of growth among Hispanic sub-groups was experienced by the Central and South American population (+40%), followed by Other Hispanics (+33%), and Hispanics of Mexican origin (+22%). Puerto Ricans (+11%) and Cubans (+7%) experienced the smallest amount of growth during this time period (U.S. Bureau of the Census, 1988). The U.S. population is projected to increase by 12.3 percent during the 15 years between 1985 and the year 2000. Nearly 60 percent of this projected growth will occur among minority populations. The overall 12.3 percent increase includes a projected 45.9 percent increase in persons who are of Hispanic origin (WICHE: Western Interstate Commission for Higher Education, 1987). This comparatively rapid increase in the Hispanic population is related both to higher birth rates and to continuing immigration.

The data in Table 1 provide a comparative overview of select demographic characteristics for United States citizens who are Hispanic and non-Hispanic. As indicated, the median age of Hispanics is 23 years, as compared to a median age of 32 years for non-Hispanics. This difference reflects a larger proportion of children and adults of childbearing age. As an example, during the past decade the birth rate among Mexican Americans was about 2.9 children per female, as compared to 2.4 for African Americans, 2.1 for Mainland Puerto Ricans, 1.7 for Anglo Americans and 1.3 for Cuban Americans. However, it should be noted that the Mexican-American birth rate is not high in historical terms since the Anglo-American birth rate during the "baby boom" of 1946-1964 was also 2.9 births per female. A birth rate of about 2.1 children per female is necessary just to maintain a population (WICHE, 1987).

The data in Table 1 also indicate that 25 percent of all Hispanic families were below the poverty level in 1986, as compared with 10 percent of non-Hispanic families. There is, however, wide disparity among sub-groups as shown by the range from 13 percent for people of Cuban origin to 38 percent for people of Puerto Rican origin for

families below the poverty level in 1986. Also, as shown on Table 1, the median earnings of Hispanic men was $11,958 which is only 61 percent of the median earnings of non-Hispanic men. The comparable ratio of Hispanic to non-Hispanic earnings for women was 82 percent (U.S. Bureau of the Census, 1988). Table 1 also shows a wide range of educational achievement among the Hispanic sub-groups and notable disparity between the Hispanic and non-Hispanic populations.

**Table 1.**
Selected Demographic Characteristics for U.S. Non-Hispanic Population by the Type of Origin

| Characteristic | Total Non-Hispanic Population | Hispanic Population by Origin | | | | | |
|---|---|---|---|---|---|---|---|
| | | Total Hispanic Population | Mexican Origin | Puerto Rican Origin | Cuban Origin | Central or S. American Origin | Other Spanish Origin |
| **Median Age:** | | | | | | | |
| Years | 32.6 | 25.1 | 23.5 | 24.3 | 35.8 | 27.3 | 30.9 |
| **Family Income:** | | | | | | | |
| Median | $30,231 | 19,995 | 19,326 | 14,584 | 26,770 | 22,246 | 24,240 |
| Percent Below Poverty (1986) | 10 | 25 | 25 | 38 | 13 | 19 | 19 |
| **Education:** | | | | | | | |
| Percent < 5 Years | 2 | 12 | 15 | 10 | 6 | 6 | 5 |
| Percent ≥ 12 Years | 77 | 51 | 45 | 54 | 62 | 59 | 64 |
| Percent ≥ 16 Years | 21 | 9 | 6 | 8 | 17 | 12 | 14 |
| **Median No. of Years:** | | | | | | | |
| | 12.7 | 12.0 | 10.8 | 12.1 | 12.4 | 12.3 | 12.4 |

Adapted from: U.S. Bureau of the Census, 1988

## EDUCATIONAL EXPERIENCES OF HISPANICS

U.S. Census data (U.S. Bureau of the Census, 1988) indicate that Hispanics as a group showed some gains in educational levels between 1982 and 1987. However, in 1985 only half as many Hispanics aged 18 to 21 years were enrolled in college (22%), as compared with the non-Hispanic population of the same age (39%). By 1987 only 51 percent had completed four years of high school as compared to 77 percent in the non-Hispanic population, and only 9 percent had completed four or more years of college as compared to 21 percent in the non-Hispanic population.

Hispanic students now have the highest school dropout rate among the major ethnic subgroups in the United States, varying from 45 to 85 percent in different regions of the country (Olivera, 1987). The national high school dropout rate for Mexican American and Mainland Puerto Rican youths is about 50 percent, and at least 10 percent of Hispanic youths do not even enroll in high school (Fields, 1988). A variety of factors have been cited by Hispanic leaders as contributing to the high school dropout rate. These factors include frequent family moves, children not knowing the alphabet or numbers before they begin school, language difficulties, illness related to poor nutrition in poverty-level families, and poorer schools and teachers in predominantly minority areas (Fields, 1988). By the time Hispanic students reach the fifth through the eighth grades, nearly 50 percent of the Hispanic children are behind grade level, as compared to 25 percent of the Anglo-American students. Of those who do make it through high school, only about 37 percent enroll in college-preparatory courses.

Young (1987), in a discussion of two recent reports by the American Council on Education and by the Education Commission of the States and the State Higher Education Executive Officers, indicates that only one of ten Hispanics who graduated from high school in 1980 (the last year for which retention data are available) enrolled in

college full time and remained full time for four years. In contrast, one of five Anglo-American students in the class of 1980 continued full time in college. The Bureau of Health Professions, within the federal Health Resources and Services Administration, reported that only 4.4 percent of all the persons enrolled as undergraduate students in institutions of higher learning during the academic year 1982-83 were Hispanic (Hatch, 1985).

As previously noted, however, there is considerable variation in educational attainment among the various Hispanic subgroups. As an example, in 1987, 62 percent of the Cuban Americans finished high school and 17 percent graduated from college, whereas 45 percent of the Mexican Americans finished high school and only 6 percent finished four or more years of college (see Table 1). Much of the immigration to the United States from Cuba was politically rather than economically motivated, and consequently more of these immigrants came from educated or middle-class backgrounds. This educational background is reflected in their higher level of educational attainment when compared to other Hispanic sub-groups.

Many factors can interfere with a student's decision to enter college, such as the need to seek immediate employment in order to help support family members, the lack of parental understanding or valuing of higher education, the lack of information regarding financial aid, the lack of successful role models who are Hispanic and college-educated, and the reliance by many colleges upon standardized tests for admission decisions — tests on which minorities traditionally do less well than Anglo-Americans (Fields, 1988). English proficiency is also an important — and controversial — factor that limits the educational attainment of some Hispanic students. A significant proportion of Hispanic students need remedial work in English after they enroll in college (Fields, 1988). However, there is no "typical" Hispanic student, since many are proficient in English and others have only a very limited exposure to the Spanish language.

Generally, Hispanic students are more likely than other groups to enroll in community colleges. For example, in the academic year 1986-87, 54.4 percent of all Hispanic college students were enrolled in community colleges as compared with 36 percent of Anglo-American college students and 42.7 percent of Black college students (Fields, 1988). However, there has been a decline in the enrollment of all students and among minorities in particular recently, and many community colleges have developed and implemented marketing strategies designed to increase minority student enrollment.

Galbraith (1989) has completed a study of the characteristics and effectiveness of marketing programs in 22 urban community colleges that were designed to increase minority student enrollment. Fifty percent of the colleges reported that they had an increase in the enrollment of recent minority high school graduates in the past two years, with an average increase of 6.1 percent each year. The marketing strategies and programs were seen as being directly responsible for this increase.

Many of the specific marketing techniques and foci that were used to increase enrollment at the community college level could prove to be equally effective for institutions of higher education. Such strategies included a) attention to the comprehensiveness of programs and services, b) consideration of accessibility, proximity, and convenience, c) emphasis upon the comprehensive nature of financial aid services, d) techniques to increase the awareness of educational and career opportunities among minority populations, e) linkage between the educational system and employment, f) increased staff sensitization to all people, g) techniques for targeting specific minority groups, h) increased community visibility, and i) consistent and persistent activity that is supported throughout the entire institution.

Many of the students who do attend community colleges never transfer to four-year institutions. As an example, the Texas College and University System Coordinating Board found that only 19.3 percent of the Hispanic students enrolling in community college transfer

programs in the fall of 1981 had transferred to a senior institution by the spring of 1985 (Fields, 1988).

A Carnegie Foundation (1988) analysis of data for Hispanics who entered college during a nine-year period from 1978 to 1986 gives considerable insight into the key factors affecting college selection by Hispanic students. They include:

- Parental influence,
- Proximity of family to college,
- Economic situation of family, and
- Financial-aid available from the college.

After enrollment, these factors continue to influence the Hispanic student and many of them experience the college environment as strange and stressful. Fiske (1988) summarizes the dilemma as follows:

> **Culture shock is a reality for many, if not most Hispanic college students when they first set foot on an American college campus ... The problems range from the anxiety of breaking close family ties to the loneliness and tensions inherent in finding their way in institutions built around an alien culture. Some Hispanic undergraduates complain of subtle or not-so-subtle discrimination. Even those from secure and privileged backgrounds are often thrown off-balance by finding themselves identified as belonging to a 'minority' group for the first time. (p.29)**

It is evident from the data and information provided above that the pathway from kindergarten through high school and then through college is extremely difficult for Hispanic students. The pool of baccalaureate students from which UAPs have to draw is obviously limited and dependent upon the success of early intervention programs at the elementary, secondary, and undergraduate levels of education. To increase the number of UAP Hispanic trainees will most likely necessitate the collaboration of UAP staff with the educators and advocates presently involved in early intervention programs.

## HISPANIC UNDERREPRESENTATION IN THE HEALTH AND SOCIAL SCIENCES

Underrepresentation of Hispanic and other minority persons in the health and social science professions means that the percentage of persons in those professions who are from a particular minority group is not proportional to the percentage of persons from that group in the total population. There are no health professions in which the percentages of Hispanic practitioners or students are equal to their representation in the general population (Deuschle, 1981).

The most recent statistics from the Health Resources and Services Administration predict that during the time period between 1985 and 2000 the number of Hispanic physicians will increase by only 35 percent (Public Health Service, 1988). However, because this projected rate of increase is based on the insufficient number of Hispanic physicians presently available, it will not result in parity for Hispanics in the medical profession. Although comparable figures for allied health programs are not available, there is informal agreement among administrators that decreasing numbers of students (minority and non-minority) are applying to these programs (Tysinger and Whiteside, 1987). Much of this decline has been attributed to a decrease in the number of college-age students in the general population and to the resulting increase in competition among various higher education programs for qualified students. In fact it should be noted that the identification and recruitment of students into the health professions, whether Hispanic or non-Hispanic, has become a matter of survival for many of the schools that prepare students for careers in the health professions, including UAPs.

The lack of minority health professionals is significant because it impinges on both the quality and availability of health care in minority communities. The health science literature and the disease control statistics provide evidence that the present health care delivery system, which is staffed primarily by members of the majority culture, has failed to solve adequately the health problems related to the ethnicity and life style of either Black or Hispanic Americans (Carrington, 1981). This does not imply that all health care for

minorities should be provided solely by minority health professionals, nor that minority health professionals should provide health care only to minorities. However, if our nation is committed to an integrated society and to equal opportunity, then every consumer (Hispanic and non-Hispanic) should be able to obtain health care from a professional (Hispanic or non-Hispanic) of his or her own choice. Currently, this choice is not available to minority consumers and it will not be until the ratio of minority health professionals to the minority population is at parity with the majority population (Hanft, 1984). As an example, in 1982 in California only 5.5 percent of the 50,663 physicians in the state were members of minority groups (Garcia and Fowkes, 1987). There was one Anglo-American physician for every 357 Anglo Americans, as compared with one African-American physician for every 1,324 African-Americans and one Hispanic physician for every 4,875 Hispanics. Similar proportions are found in other states and in other health care professions. Generally, minority health care providers, particularly physicians, are more likely than majority providers to serve underrepresented sub-groups (Davis, 1982; Adams, 1986; Keith, 1985; Garcia and Fowkes, 1987). Consequently, the shortage of minority practitioners has a direct and negative effect on the health care provided to underrepresented populations.

Patient care studies have suggested that better communication between patient and provider has a positive effect on health outcomes. This is more often possible when health professionals and their patients have the same cultural background and when majority health professionals have increased cultural sensitivity as a result of working with and learning from minority health professionals (Harwood, 1981; Pinn-Wiggins, 1985). Furthermore, all health professionals, whether members of specific Hispanic sub-groups or not, will benefit from formal coursework and continuing education programs designed to enhance their cultural sensitivity (DeBlassie, 1981). While it is clearly an advantage for a health professional to be a member of the specific minority group being served (or taught), it is more important that the professional be interested in and demonstrate sensitivity to that group's culture.

## MODEL RECRUITMENT AND RETENTION STRATEGIES

This section presents a number of strategies that need to be included in any successful program designed to recruit and retain Hispanic and other minority students at the college level. They are:

A. Institutional Commitment and Leadership
B. Faculty Commitment and Sensitivity
C. Recruitment of Minority Faculty
D. Minority Involvement
E. Parental Involvement
F. Early Identification and Intervention
G. Comprehensive Support Systems

The first three strategies are directed at the organization and most likely should be addressed first. The remaining strategies focus on specific approaches and programs that are directed toward Hispanic professionals or Hispanic students and their families.

A number of model recruitment and retention programs for Hispanic students are included in Appendix B. These programs emphasize the strategies discussed in this section and other innovative approaches to the recruitment and retention of Hispanic students. This section, in combination with Appendix B, provides innovative ideas and approaches that can be used to modify or to develop individual UAP recruitment and retention plans that incorporate the above strategies.

### A. Institutional Commitment and Leadership

There must be a strong commitment at all levels of the institution to the goal of developing a comprehensive minority recruitment and retention program. In general societal efforts during the past two decades to increase minority representation in the health sciences have been based upon two strategies:

(1) the development of early educational programs and experiences to gain the interest of, and to prepare better, the potential student, and

(2) the implementation of financial, educational, and social support programs to encourage the retention of enrolled students (Acker, Freeman and Williams, 1988).

These strategies continue to be important components of any recruitment and retention program, and they are discussed later in this Section. A critical question, however, is why these strategies have not worked. Green (1989) suggests that current strategies have been insufficient because they are "piecemeal" and not an integral part of a program that is supported by institution-wide policies and a comprehensive plan. The leadership and direction for the comprehensive plan must come from the top, beginning with the chief executive officer and the governing boards or committees (Cameron, 1987; Green, 1989).

Green (1989) recommends that the leadership of the university begin with an audit of the history and current status of the institution. She recommends a committee approach to the audit that involves members of the governing board, faculty, professional staff, support staff, and students. This audit can be used to develop a current profile of the university, be used as a guide to develop the comprehensive plan and appropriate policies and procedures, and to monitor and evaluate the progress of the institution toward the achievement of its recruitment and retention goals. Components of the plan should include:

- Mission statement that is consistent with the values of the institution,
- Goals that are quantitative and qualitative, long-term and short-term, and
- Timetables for implementation of specific goals and monitoring the progress of the program.

The following strategies should be incorporated into the design of a comprehensive plan for the recruitment and retention of minorities.

### B. Faculty Commitment and Sensitivity

The successful implementation of a recruitment and retention program will be dependent upon the cooperation, commitment, and leadership of the faculty and staff of the institution (or the UAP). Garcia and Fowkes (1987), in describing recruitment and retention strategies designed to increase the number of minority students in a physician assistant program, emphasized that the involvement and willingness of faculty members to try different educational approaches were essential to the success of the project. Minority students presented different attitudes, assumptions, and learning styles to the faculty than did the non-minority students. In response, faculty members met to discuss their attitudes about racism and to learn to teach in new ways. The addition of physician assistants who were minorities to the faculty was especially important, since this faculty served as role models for the students and as colleagues with new perspectives for other faculty members.

The findings from Buckley's (1980) study of faculty commitment to the recruitment and retention of Black students in schools of nursing can be generalized to all educationally disadvantaged groups including Hispanics (Sward, 1984). Buckley concluded that remedial programs, flexible requirements, and other innovative approaches were of little benefit without a firm commitment on the part of the faculty. Faculty commitment to the education of the students was posited as being the single most important determinant of success in enrolling and retaining these students in schools of nursing.

Flack (1980) made a number of observations about the physical therapy profession which are applicable to other allied health professions. These included the statements that the profession not only has failed to provide minority students with the opportunity to pursue professional careers, but also that the profession has not yet integrated an understanding of cultural and ethnic diversity into its educational training programs. Minority students who are admitted into undergraduate and graduate programs may be taught by faculty and

clinical supervisors who lack cultural sensitivity, and they generally are not provided with strong minority faculty role models.

This is not to say that all faculty teaching minority students must themselves be minorities. The important issue is that the faculty members be interested in, and demonstrate sensitivity to the minority student's cultural background. Even when faculty are members of a specific minority group, there may be a lack of cultural sensitivity. As Cross (1988) has indicated "minority professionals ... trained in the dominant society's frame of reference ... may be little more competent in cross-cultural practice than their co-workers." Minority professionals, like all other professionals, need formalized training and continuing education in the functions of culture and its impact on client or student populations (Cross, 1988; De Blassie, 1981).

### C. Recruitment of Minority Faculty

Despite the fact that all professionals and faculty, Hispanic and non-Hispanic may need formalized coursework to enhance their cultural sensitivity, the findings from most of the studies cited earlier indicate that the hiring of minority faculty is a critical component of any successful endeavor to recruit and retain minorities. Olivas (1988) states that increasing the number of Hispanic professors is the single most important key to success in increasing Hispanic access to higher education. At present, however, Hispanics constitute 1.5 percent of all faculty and only 1.1 percent of all tenured faculty. Even these figures may be misleading, as professors from Spain, Brazil, Portugal, and South America, as well as Anglo-American women who are married to Hispanic men, may be identified and tallied as U.S. minority faculty members (Mooney, 1989).

Olivas (1988) has a harsh commentary on the failure of the law schools to recruit Hispanic faculty which he feels can be extended to other academic fields. He states:

> a powerful mythology permeates law hiring, as it does in nearly all academic fields - that there are too few minority candidates for too few positions, and they possess unexceptional credentials for the highly credentialed demand ... Not only does this myth not square with available data, but the practices ignore the supply-side responsibility of law schools and the lack of marketplace alternatives for Latinos in other legal employment. After all, major firms and governments are not much more accessible to Latinos than are law faculties. The answer is an unpopular one because it entails racism, which permeates the academy as it does all of society. (p.7)

Olivas has outlined a number of suggestions for increasing minority representation on the faculties of law schools that are equally applicable to other departments and schools within this country's institutions of higher education. They are:

1. Faculty should encourage minority alumni who are practicing professionals to consider teaching, to register for the profession's national conference meetings, and to register for the formalized placement service that is held in conjunction with those meetings.

2. Department Chairpersons should identify minority practitioners who may not wish to leave their present position, but who might be persuaded to teach as an adjunct professor. This would expose students to minority professionals as well as encourage minority professionals to consider teaching as a possible alternative career opportunity.

3. Faculty in all disciplines should encourage minority students by hiring them as teaching or research assistants.

4. Minority faculty should be appointed to chair search committees and not merely to serve as the lone minority representative.

5. Majority schools should recruit faculty or graduates from the Historical Black Colleges and Puerto Rican institutions that have always been able to recruit faculty.

6. Placement and search firms are regularly used by major universities for administrative searches; they could be used by academic departments to find minority faculty talent.

7. Most universities have funding mechanisms that reserve resources for the occasional superstar, faculty spouse, senior administrator, or other out-of-the-ordinary hirings; resources should be reserved in the same way to encourage the recruitment of minority faculty.

8. Courageous provosts, deans, and presidents could insist that schools or departments with one or no minority faculty cannot hire any majorities until they achieve success in attracting minorities.

Olivas further suggests that these are not revolutionary or even unusual suggestions; most law schools and other schools/departments use them, or versions of them, when recruiting the hard-to-find specialist. That same diligence should be used to recruit minority professors.

### D. Minority Involvement

Faculty and students who are Hispanic and who are members of other minority cultures should be involved in all phases of the design, development, implementation, and evaluation of a recruitment and retention program. This section, however, will focus on the use of minorities who actively participating in the recruitment activities within the community.

Although a number of factors have been cited as contributing to the underrepresentation of minority groups in health careers, a resulting and continuing problem is the lack of minority health care professionals who can serve as role models in the minority community. While more research on the success rates of counseling across cultural lines is needed, it appears that minority students and faculty members may have greater success rates in recruiting and counseling potential minority students.

Gitchell and Fitz (1985) reported on the design and implementation of a Clinical Dietetics Minority Recruitment Project which addressed the issue of role models by hiring one minority clinical dietitian and one minority student to compose their recruitment team. The rationale behind this approach was the belief that a successful senior student and a practicing dietitian who are members of minority groups can act as role models that high school students will want to emulate. The two individuals represented Black-Americans and Hispanics, two of the larger minority groups in the area. Additionally, a network of clinical dietetics alumni was established to seek out and recruit students in targeted areas (presumably minority) of the city. This program has been implemented with funding from the American Dietetic Association Minority Recruitment Award, but the results from the evaluation phase have not yet been published. Thurmond and Collier (1984), however, have reported that involving students from the African American Student National Medical Association at the Medical College of Georgia in the recruitment of other African American students increased their enrollment rate from 50 percent of the students accepted into the program to 70 percent and 62 percent in the first two years of the program, respectively.

Another strategy for increasing the number of minority students is to utilize minority professionals and paraprofessionals who practice in low-income and underserved areas a high priority as members of the recruitment team. Fowkes et al. (1983), Goldberg et al. (1984), and Garcia and Fowkes (1987) describe the establishment of a decentralized community network for the recruitment and training of physician assistant (PA) students. The network consists of organizations and agencies located in or near medically underserved areas that conduct recruitment activities and participate in an admission process conducted in their community for candidates residing in their respective service areas. These agencies include community colleges, colleges and universities, public and private clinics and clinic systems, state and private health career organizations, and clinics serving groups with large proportions of minorities.

In contrast to traditional recruitment and admission procedures that require the candidate to initiate contact and are generally conducted in an office, recruitment activities take place in the potential applicant's home, school, or work site. A Hispanic male who is bilingual and bicultural and who is knowledgeable about the health care needs of the minority community was hired full time to implement the recruitment program. Tracking mechanisms were established to maintain contact with potential and actual minority applicants throughout the admission process, and public media were used to promote the program.

### E. Parent Involvement

Garza-Lubeck and Chavkin (1988) have suggested that while financial difficulties and lack of academic preparation are serious obstacles to the recruitment and retention of Hispanic students, overcoming these obstacles will not in itself solve the problem because of the extremely high dropout rate among Hispanic students. In some areas of the country, for example, a 60 percent school dropout rate is a conservative estimate (Olivera, 1987). Recruitment efforts directed only toward secondary schools will not be effective since nearly half of the potential Hispanic college students may have already dropped out.

Partnerships between Hispanic parents and educators are suggested as being critical in helping to alleviate the underrepresentation of Hispanics in higher education. The rationale for including Hispanic parents in the recruitment and retention efforts of higher education programs is summarized by Garza-Lubeck and Chavkin (1988):

> **In the Hispanic community, as elsewhere, education is not only a concern of the individual student, but also the family. Moreover, educational opportunities originate not in secondary schools, but in the primary grades. Therefore, the involvement of Hispanic parents, and in particular the parents of elementary-aged students, is of crucial importance in helping to rectify the under-representation of Hispanics in colleges and universities (p.311)**

Garza-Lubeck and Chavkin (1988) have reported the results of a six-year study conducted by the Southwest Educational Development Laboratory that focused upon the attitudes and practices toward parent involvement in education in six states (Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas). Although the 506 Hispanic parents in this survey were of working-class background and bilingual, they were found to have very strong interests in both traditional (audience, home tutor, school program support) and non-traditional (co-learner, advocate, parent as paid school staff member, parent as decision maker) forms of parent involvement with the schools.

In a separate, but related part of this study, information gathered on pre-service teacher training from 575 institutions of higher education in the same six-state region indicated that only four percent of the institutions offered a course that would prepare teachers for parent involvement, only 15 percent had a module or part of a course directed toward this topic, and only 37 percent reported that even one class was used for the discussion of parent involvement in education. In reporting the final results of their study Garza-Lubeck and Chavkin (1988) conclude:

> **Recruitment and retention efforts extended toward Hispanic parents, and especially parents of elementary-age children, will help create a climate of trust that will go a long way toward alleviating the educational difficulties of Hispanic students. When parents feel welcome and appreciated by school officials, chances are that their children will feel the same ... Parents of young children need to know that higher education is a real opportunity for their children. They need to know the "long range game plan", which educational track is necessary, what kinds of financial aid options are available, what are the requirements for college entry, and perhaps most important, that higher education officials want their children to attend college, and see no reason why they can't. (p.319-20)**

Family involvement may also be important at the secondary level of education. The families of Hispanic adolescents who are 15 years old and "at risk" for dropping out of high school are the focus of a three-

year study being conducted by the Center for Mexican American Studies under the direction of Harriett Romo, Ph.D. and the Population Research Center under the direction of Toni Falbo, Ph.D., which are located at the University of Texas at Austin. The study, which was funded by the Hogg Foundation for Mental Health, will follow the adolescents and their families in order to determine the types of coping strategies used by families and which strategies lead to school retention for the at-risk student. The family system, rather than the adolescent is the main concern of the study. U.S. and Mexican-born families will be included and the study will take into consideration the educational levels of the parents, differences in socioeconomic status, migration patterns, and other demographic and psychosocial variables (Neff, 1988).

### F. Early Identification and Intervention

As indicated earlier, early intervention programs have been one of the basic strategies used to increase the number of minority students in the health professions. High school minority recruitment programs for the health science professions have often focused upon those junior or senior students having high grades in the basic sciences. However, an effective early identification program for Hispanic students would begin earlier and involve the prevention of academic difficulties, remedial assistance for students with manageable academic problems, and improved counseling on course selection and career opportunities (Davis and Davidson, 1982). This section describes four programs, as follows:

- Health Career Opportunities Programs, which are exemplary, national, summer-enrichment programs;
- the Med-COR Program, which is a three-year program for cohorts of high-school students;
- a High School for the Health Professions, which trains high- school students and teachers; and
- a non-traditional, value-based summer-enrichment program for high-school and college students.

Health Career Opportunities Programs. Each year more than 150 structured programs designed to help minority and disadvantaged students enter college and graduate into professional health careers are conducted at universities across the country. These Health Career Opportunity Programs (HCOPs) are supported by the Division of Disadvantaged Assistance, Bureau of Health Professions, Health Resources and Services Administration through a competitive grant process. In 1987, nearly 13,000 high school, college, graduate and professional students, who were in various stages of their career planning and preparation participated in the HCOP programs. Of these students 76 percent were black, 16 percent were Hispanic, 3 percent were Native American Indians or Alaska Natives, 3 percent were Asian-Americans or Pacific Islanders, and 2 percent were disadvantaged Anglo-Americans (Public Health Service, 1988). These programs are exemplary in that they provide preliminary education in the health sciences, tutorials on test-taking, studying habits, and so forth, and they provide supportive counseling throughout the admissions process and during college. These programs could be a valued resource for UAPs who have an HCOP associated with its affiliating university or with one of its feeder colleges.

During 1991-92, the UAPs at the University of Nebraska Medical Center, the University Affiliated Training Program at Children's Hospital of Los Angeles, and the University Affiliated Center at the University of Texas Southwestern Medical Center at Dallas will be piloting three prototypic models of HCOP/UAP joint programming. At California, Sam Chan, Ph.D., will be developing a "flagship" model which will collaborate with multiple HCOP programs in the Los Angeles area. The Texas UAP, under the direction of Carol Hickey, Ph.D., R.D., and Delia Solis, M.S., R.D., will be developing a "pony-express" model which will involve HCOP programs in Texas and surrounding states. The UAP at Nebraska, under the direction of John McClain, ACSW, Ph.D., will develop a three-week "integrated" model with the HCOP program at its affiliating university. These prototypic models will include instruction on some of the medical aspects of developmental disabilities, information about the health career opportunities that

are available in the field, and information on how to acess the UAP training programs across the country. It is anticipated that approximately 500 students will participate in these programs each summer during 1991 and 1992. After the models have been implemented and evaluated, all UAPs will be provided with information regarding the structure and content of the programs and the evaluation results. This information should assist UAP faculty in the development of coordinated HCOP and UAP recruitment efforts within their state and region.

Med-COR Program. The Med-COR Program (Medical Counseling, Organizing, and Recruiting) is a high school academic enrichment program sponsored by the University of California School of Medicine for minority students attending inner-city schools. Each year fifteen students in the 10th grade of select schools were invited to participate in the program and were encouraged to work together as a "cluster" during their remaining three years of high school and throughout the program. The program provided the students with the following:

- guidance regarding appropriate course selection,
- Saturday Tutorial Programs that stressed academic enrichment in math, science, English, study skills, and conceptual development, and
- summer work/study programs which introduced them to the health care system and provided basic course instruction in medicine, science, and laboratory research.

The parents of the students met once a month and were organized into several committees and encouraged to become involved in the educational process of the students. The parents also were provided workshops on study skills, financial aid, college application processes, and health career opportunities. A total of 480 students took part in Med-COR over a five-year period (1973-1977) and 410 (85%) completed the full three years (93 percent of the dropouts were in the 10th grade). Of the 410 graduates of the program, 240 responded to a

follow-up questionnaire in 1980. The results of the survey indicated that two (1%) completed medical school, fifteen (6%) were in medical school, six (3%) were in dental or pharmacy school, twenty-one (9%) were enrolled in non-health related graduate programs (primarily engineering and business), and 188 (78%) were undergraduate college students (88 premedical, 37 pre-nursing, 10 other allied health fields, 29 non-health related majors, and 24 undecided). Although the findings of the Med-COR evaluation must be interpreted with caution because of the follow-up response rate of 59 percent, the findings support the view that programs focusing on early academic intervention during high school are effective for increasing the number of minority health professionals. Additionally, it should be noted that the program attracted the "B" students in high school (median GPA for all students was 3.1), which suggests that the program tapped students who might not have entered a health profession without assistance (Davis and Davidson, 1982).

High School for the Health Professions. Another approach to early intervention which has been used in many cities is that of creating a high school for the health professions. The Houston (Texas) Independent School District and Baylor College of Medicine initiated its High School for the Health Professions, which is a model program that has been replicated in many states. When the program began in 1972, 45 students attended classes on the Baylor campus (Thomson, 1984). The program now has a total enrollment of 750 students (43% African-American, 33% Hispanic, 20% Anglo-American, and 4% Asian-American). This program combines a comprehensive academic curricular program for grades nine through twelve with specific learning experiences designed for health-related professions. Approximately 600 students apply for admission each year, and 200 are accepted based on previous academic performance and teacher recommendations. Eighty-five percent of its graduates attend college.

Another facet of the Houston program is a research apprenticeship in which up to 150 minority students spend a minimum of three hours each day in a science laboratory and are engaged in a scientific

research activity with a Baylor faculty member. This program also sponsors a work/study program for minority college students and a three-year program for secondary school life-science teachers. The latter, which is designed to increase the scientific knowledge and skills of the teachers, has two expected outcomes. First, it is anticipated that the teachers will apply the new knowledge toward the development of enhanced life-science curricula and curricular materials for their high-school students. Second, it is expected that a significant number of the 25,000 high-school students (80% of whom are minority) taking these improved courses will decide to pursue careers in medicine and the sciences as a result of their improved education in the life-sciences.

Non-traditional Program. Fogleman and Saeger (1985) reported on an eight-week, summer-enrichment program for talented minority high school and college students which included a variety of structured affective or non-traditional components designed to motivate the students to enter and to complete professional schools. The program was designed to promote the incorporation of eight non-traditional variables which have been associated with minority student success in the health sciences. These non-traditional variables were originally identified by Sedlacek and Brooks (1976) in a study of non-traditional predictors of success in the health sciences by minority students. They are:

1. **Positive Self Concept.** Confidence, strong "self" feeling, strength of character, determination, independence.

2. **Realistic Self-Appraisal.** Recognizes and accepts any academic or background deficiencies and works hard at self-development.

3. **Understands and Deals with Racism.** Committed to fighting to improve the existing system, not being submissive, and being able to handle a racist system. Asserts that the school has a role or duty to fight racism.

4. **Preference for Long-Term Goals over Short-Term or Immediate Needs.** Understands and is willing to accept deferred gratification.

5. **Availability of a Strong Support Person.** Has a person of strong influence who provides advice.

6. **Successful Leadership Experience.** Has shown the ability to organize and influence others within his or her own racial-cultural context.

7. **Demonstrated Community Service.** Has shown evidence of contributing to his or her own community.

8. **Demonstrated Medical Interests.** Has shown evidence of participation in health-related activities.

Both the study conducted by Sedlacek and Brooks (1976) and the program described by Fogleman and Saeger (1985) have implications for early intervention strategies and for the admission policies of universities. Generally, standardized testing instruments, such as the Scholastic Aptitude Test (SAT), have proven to be a barrier to the enrollment of minority students in college programs and medical schools. However, these tests may not be the ideal determinant of intellectual potential or predictor of success in college for minority applicants (Carter, 1985). The non-traditional value variables described above have been found to be useful for assessing minority applicants for medical schools and can be used in combination with SAT, GPA, and MCAT scores. They also have been shown to have validity in predicting the success of minority students in higher education, particularly when understood and interpreted within the cultural context of the minority applicants (Prieto, 1987). These non-traditional variables could be incorporated into the criteria used by UAPs to select trainees, minority and majority, for the UAP training programs, and in follow-up evaluations of trainees could be used to assess the validity of using these criteria to select UAP trainees.

In summary, a variety of early intervention strategies are needed if Hispanic students are to make it through what has been described as a "very leaky pipeline" to the graduate level where they can be recruited as UAP trainees. As noted earlier, Hispanics now have the highest school dropout rate in the nation, making it mandatory that recruitment and retention efforts begin with early intervention programs in grade school and continue throughout the undergraduate years. Therefore, UAP faculty and staff will need to involve themselves in the intervention programs of their affiliating and feeder universities in order to effect the successful recruit or Hispanic trainees.

### G. Comprehensive Support System

Minority students matriculating on predominantly majority campuses encounter an array of problems and situations which make a comprehensive support system an essential component of any minority student recruitment and retention program. Minority students often feel alienated and isolated from the faculty, majority peers, and even the educational program itself. This section discusses and provides examples of support programs that provide academic, financial, and comprehensive support.

Academic Support. Ficklin, Hazelwood, Carter and Shellhamer (1985) described the Reduced Load Program offered at the Indiana University School of Medicine to students who were experiencing academic difficulty during the first year of medical school. The program, which was available to minority and non-minority students, was provided as an alternative to dismissal at the end of the first term. In addition to a reduced class load, the students were given help with study and time management skills. Students with specific subject deficiencies were assigned to appropriate faculty or peer counselors for tutoring and/or assigned to audit basic science courses. At the time of the follow-up study all 37 students assigned to the program between 1973 and 1979 had completed the basic science portion of the

four-year curriculum. Almost 49 percent of the students in the Reduced Load Program were still in school or had graduated, 40 percent had withdrawn for academic reasons and 11 percent for personal reasons. The authors of the study concluded that the program was effective since all of the participants were in serious jeopardy of dismissal from medical school before joining the program. Students reported little difficulty in adjusting back to a "full load" for their sophomore year. The extra year did create financial difficulties for some students, and several students would have preferred starting school under the program. However, they had no suggestions as to how such assignments might be made, and others stated that they would not wish to begin medical school identified as needing special treatment.

Financial Support. Financial assistance needs to be provided in the form of traineeships and/or scholarships. The design of a minority recruitment and retention program without at least some basic support for the tuition and living costs of the minority students can only be considered as a token approach. As an example, Cole (1985) reported that even though the number of entry-level minority students in speech-language pathology and audiology programs has increased, the retention rate has been on the decline. Minority students have indicated to the American Speech and Hearing Association office that financial constraint is the primary contributing factor affecting retention. Cole (1985) summarizes by stating that "federal budgetary cuts, limited student loans, redirected priorities of lending institutions, and the constantly increasing cost of education often turn the 'open door' of higher education into a 'revolving door'."

Gitchell and Fitz (1985) reported that their Clinical Dietetics Minority Recruitment Project is attempting to address the need for financial assistance by exploring the possibility of making their program available on a cooperative education basis whereby students can work and go to school on a schedule of rotating modules. Students attending under this plan could be expected to take more years to complete their education, but would have the added benefit of work experience in some aspect of dietetics along the way.

Comprehensive Support. Harrison and McBride (1981) have described a minority recruitment and retention model which includes the provision of a comprehensive network of resources through which minority students can improve academic and professional achievement. The support program was established for a department of medical allied health professions and it combines academic, financial, and social support objectives into one comprehensive program. Specific objectives include the following:

1. operationalize an early warning system for academic problems, designed to increase the retention of minority students;

2. make financial support available to minority students for long- and short-term (emergency) needs;

3. establish a social support network which will include community resources of significance to minority students;

4. establish an enrichment support mechanism designed to enhance the minority student's academic performance; and

5. organize a peer support system which will provide minority student counseling by other minority students or health professionals.

An advocate for minority students was employed to assure that these objectives and the other components of the model (recruitment, admissions, career realization) operated with consistency and were monitored properly. The advocate is also responsible for implementing, coordinating, monitoring, and evaluating the model and for providing direct services to students through counseling and the development of a socialization network.

In summary, until attention is directed toward the social, educational, and economic inequities which have contributed toward the minority or disadvantaged students lack of academic skills and to the racial discrimination and financial problems they encounter, these students will continue to require more in terms of personal and academic support and in terms of the time required to complete a college curriculum. Such a comprehensive support system requires the type of institutional commitment and resources discussed at the beginning of this section.

## PROGRAM DEVELOPMENT, EVALUATION, AND MONITORING

It is critical to the successful development and implementation of any UAP training, service or research program that faculty and staff recognize the intra-ethnic group diversity of the Hispanic population within the United States. The evaluation and monitoring of these programs will required thorough documentation of such variables as:

- the specific Hispanic subgroups, such as, Mexican American, Mainland Puerto Rican, or Cuban American,
- generational identification, such as immigrant, first-generation U.S. born, or second-generation U.S. born,
- language preference or dominance,
- parents' education, employment status, occupation, and financial status,
- trainee's employment status, occupation, and financial status, and
- trainee's educational attainment.

The literature of most disciplines contains numerous studies of "Hispanics" where these variables were not taken into account, resulting in possible erroneous conclusions or ambiguous findings (Padilla, 1984). From a practical standpoint, an appreciation of intra-ethnic diversity serves to mitigate the tendency of educators, health professionals and others in this society to stereotype members of ethnic groups. The social system in the United States has in various ways caused ethnic and class statuses to be closely interrelated, and, at times, inseparable. Therefore, behavioral patterns, related to health practices or school attendance, that appear to be statistically correlated among members of any one ethnic group should be studied by isolating both the economic and the cultural variables that influence behaviors.

At present, a theoretical orientation is emerging in Hispanic-focused research which uses acculturation and biculturalism as major constructs within which to embed the research findings and to draw conclusions from empirical studies. As Padilla (1984) indicates:

> **Theories concerning acculturation ... have generally been based on the assumption that the acculturative process is unidirectional and dependent upon varying degrees of direct exposure to the dominant society. However in a complex pluralistic society (such) as that which exists in the United States ... acculturation ... is most probably a process involving both direct and mediated exposure to new values and different life styles, and it may also be bi-directional as both immigrants and members of their same ethnic group born in the U.S. intimately interact (p.16)**

Improved theoretical and empirical indices of acculturation processes are beginning to emerge (Cuellar, 1980; Olmedo, 1979; Padilla, 1980). Studies of biculturalism involve a focus on the maintenance of the culture of origin as well as on the acculturation process. Critical issues include determining how some Hispanic individuals are able to effectively bridge the gap between both the Hispanic and non-Hispanic culture and whether biculturalism is a desirable psychological characteristic that Hispanics should strive for as opposed to acculturation and eventual assimilation into the mainstream (Padilla, 1984).

Instead of using a stereotype or generalized approach to the study of culture and behaviors, researchers need to develop assessments of the range of behavior and cultural standards observed within specific ethnic or sub-groups and of the factors that tend to predict the observed variations. The practical importance of such an assessment for educators or health professionals would be to increase their ability to identify accurately those students or patients within an ethnic category whose relations with the mainstream educational or medical systems are most affected by culturally patterned beliefs and behaviors (Harwood, 1981).

Tysinger and Whiteside (1987) reviewed recruitment and retention programs for minority and disadvantaged students in health professions education. Their suggestions are relevant for formative and summative evaluations of program processes and outcomes. In the area of formative evaluation, they recommend:

> the recruitment and retention process should have a diagnostic/prescriptive testing component consisting of content area pretests and tests on reading skills, learning /study skills, and writing skills. Testing during enrichment programs can identify deficits that students can remediate at the feeder-institution level. Follow-up by program personnel is needed to ensure that students are gaining the knowledge and skills needed for success. (p. 215)

In the area of summative evaluation, they recommend:

> Institutions need to know more about the effectiveness of special programs. A few programs do report increased retention or graduation rates, and others report an increase in minority enrollment in health professions programs. However, few studies are available that have used sophisticated evaluation techniques to assess the effectiveness of the recruitment or retention experiences. More information is also needed about students' decisions to participate in recruitment and retention activities. Evaluation findings must then be shared with faculty so that they know that their efforts have been worthwhile. (p. 215)

Murphy and Redden (1982) have made specific recommendations for using a "management by objectives" process to refine the goals of minority recruitment and retention programs. This process includes the definition of specific indicators and measurable behaviors, as well as the delineation of desirable performance levels, time frames and individual responsibilities.

Many of the programs described in the previous sections and in Appendix B, have indicated, either explicitly or implicitly, that the recruitment and retention of minority and disadvantaged students must be viewed as a process. For Hispanic students, this process begins

with the identification of potential students at the elementary or junior-high school levels. The process continues with the on-going tracking and monitoring of individual students through college and/or graduate school, and then on through job-seeking activities and subsequent employment and career development. Such individual student tracking makes it possible to provide individualized support to students and to do longitudinal evaluations of the program.

Regardless of the theoretical orientation or methodological design that UAP faculty use to evaluate the UAPs recruitment and retention program, data should be collected on an individual basis and the intra-ethnic diversity of the Hispanic population needs to be understood and respected. Such an approach will enable UAPs to establish a baseline by which recruitment and retention efforts can be evaluated and systematically improved.

## SUMMARY IMPLICATIONS FOR UNIVERSITY AFFILIATED PROGRAMS

Despite intensified recruiting efforts, the underrepresentation of Hispanics in the health and social science professions continues. While many institutions of higher education that train future professionals have increased their minority recruitment and retention efforts at the graduate level, little attention has been directed toward pre-matriculation programs.

This review has presented a number of innovative approaches to the recruitment and retention of Hispanic and other minority students, emphasizing those areas that must be considered and included in any successful program, namely:

- Institutional Commitment and Leadership
- Faculty Commitment and Sensitivity
- Recruitment of Minority Faculty
- Minority Involvement
- Parental Involvement
- Early Identification and Intervention
- Comprehensive Support Systems

As indicated, the first step is institutional commitment and leadership. This suggests that the UAP Director needs to be fully committed to the goal of enhancing minority participation among UAP faculty and trainees. The UAP Director, with appropriate faculty, staff, and trainees, would develop a purpose statement and conduct an audit of the UAP. The audit should probably include relevant information regarding minority involvement and programs within the UAP, its affiliating university, and perhaps its feeder colleges. Based on the UAP audit and under the leadership of the Director, the UAP faculty, staff, and trainees would develop a UAP plan for the recruitment and retention of minority faculty and trainees.

The studies and programs in this monograph have demonstrated repeatedly that early intervention in the educational process is a critical factor in the recruitment and retention of Hispanic students. Yet universities seldom, if ever, allocate resources to identify potential students at the elementary level. The majority of UAPs focus their recruitment efforts at the undergraduate level, and some UAPs prefer to recruit trainees from the pool of first-year graduate students. Laurenco (1983) clearly states the need, hope, and problems associated with this social dilemma, as follows:

> **For there to be a sufficient talent pool of disadvantaged youths for graduate education to draw upon in the future, the major intervention activity needs to take place in the elementary school. If early outreach programs start with elementary school children (and their parents), the results can be an increased number of minority professionals graduating from professional schools, although the early development of talent, interest and aptitude will take several years to bear fruit. In any such programs, the close coordination of efforts by undergraduate and community colleges and secondary and elementary schools must be assured. Thus far, however it has been impossible to begin with the identification of youngsters with potential to be health professionals. No college, university or funding agency is willing to think of a longitudinal talent development effort over a 12-year period. (p.41)**

Some UAPs may decide to take a more proactive and in-depth approach to this issue. Nationally, UAPs have assumed a leadership role in the development of new programs and technologies that have had a major and positive impact on people with developmental disabilities and upon the health, education, and social service systems that are designed to serve those people. UAPs are characterized by their interdisciplinary nature, their focus upon early identification and intervention for developmental disabilities, their interests in early childhood education and special education, their concern with youth in transition, their goal of community based, family-centered, and coordinated care, and their ultimate concern with the prevention of developmental disabilities. UAP faculty function simultaneously in the educational, the social, and the health care arenas via their

various clinical training programs and affiliations. They have the background knowledge and philosophical orientation that is necessary to attain the goal of increased numbers of well-trained Hispanic professionals in the field of developmental disabilities through the effective implementation of a UAP plan for the recruitment and retention of minorities that includes early intervention strategies.

UAPs, either as individual programs or as consortiums of programs within a geographical area, are in an ideal position to take the first step toward the development of a UAP plan that involves the cooperative efforts of appropriate individuals from the Hispanic and other minority communities, the affiliating universities, and the feeder elementary, high school, and community college programs. Community-based needs assessment and strategic planning activities could be used to determine which of the specific approaches and innovations described earlier and in Appendix B would be appropriate for inclusion in the UAP plan.

Once program needs and directions are delineated, joint funding proposals could be initiated. The lobbying efforts of the American Association of University Affiliated Programs and other related organizations could be directed toward making such funding available on a national, regional, and state level. Administratively such a program could be housed within a UAP or in any one of its affiliating universities or feeder school. UAPs could become active in providing clinical internships or work/study programs for selected junior high, high school, and community college students during the school year and/or during the summer. Federal agencies that support UAPs or minority educational programs may elect to make funding available for the trainee stipends and faculty time that would be necessary to successfully undertake such programs.

In summary, a continuum of minority student recruitment and retention efforts and outcomes can be visualized and, in all probability, realized by the UAPs. Token efforts and verbal support for minority recruitment and retention can be continued, or the

recruitment and retention of minority trainees can be designated as a high priority for future efforts and funding. The need for minority professionals in the field of developmental disabilities is a theme which needs to permeate all UAP endeavors. In the future, those minority professionals will have a major role in the field of developmental disabilities. Without them, it will become increasingly difficult to provide the services needed by minority and majority people with developmental disabilities and their families.

# APPENDIX A

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# APPENDIX B

## MODEL RECRUITMENT AND RETENTION PROGRAMS

The programs described in this appendix are model programs in that they are representative examples of recruitment and retention programs throughout the United States. They are not presented as standards of excellence to be imitated, although they may in fact be extremely effective and successful programs. There is minimal hard data on program evaluation or comprehensive descriptive information on program characteristics and the methods of operation. Many of the intervention and organization programs described on the following pages were identified on the basis of recommendations from individuals currently involved in the recruitment and retention of Hispanic students and on the basis of suggestions from the Advisory Committee for this project. They were selected for inclusion here on the basis of the distinctiveness of their objectives and approach, their demonstrated commitment and exemplary process, and the usefulness of their approaches to UAPs that were beginning to design programs for increasing the recruitment and retention of minority trainees.

The programs are grouped alphabetically under the following categories:


- Intervention programs . . . . . i
- Organization programs . . . . . xvi
- Speech/language pathology and audiology programs with bilingual emphasis . . . . . xxii


Appendix C, which follows this section has a listing of Hispanic higher education Associations and related organizations that should be excellent resources for UAP staff.

# INTERVENTION PROGRAMS

**Ethnic Minority Mental Health Training (EMMH)**

Target: Postgraduate

Contact: Lisa Porche-Burke, Ph.D.
Assistant Professor and Coordinator
Ethnic Minority Mental Health Proficiency
California School of Professional Psychology-Los Angeles
2235 Beverly Blvd.
Los Angeles, California 90057
(213) 483-7034

CSPP-Los Angeles has demonstrated its commitment to the Ethnic Minority Mental Health Track, and in its successful efforts to recruit, enroll, and graduate ethnic minority students. Of the forty students who enrolled in the EMMH Proficiency during the 1988-89 academic year, 24% were members of ethnic minority groups. This sub-specialty track offers students the option of either a Ph.D. or a Psy.D. degree. The goal of the EMMH Proficiency is to recruit, educate and train students (both minority and non-minority) in understanding ethnic/cultural issues and how these issues impact upon service planning and delivery.

The curriculum includes basic core clinical content areas with special sections of courses, such as assessment, designed to include the importance and impact of cultural factors in these areas. Clinical training experiences occur simultaneously with academic course work so that students may integrate what they are learning with what they are actually doing in the field.

Students are linked with a core faculty member affiliated with the proficiency who follows the student's academic and clinical progress throughout the program and who serves as a role model for the student. Students also have an opportunity to meet with each other several times during the semester during dinner meetings, where different minority psychologists share their professional experiences with the students. Students also participate in the organization and planning of a yearly conference on a minority-related topic that is held on campus. In addition, students are involved in the development of relevant grant/contract proposals along with minority core faculty.

**Extension Training Program**

Target: College Graduate, Post-Graduate

Contact: Norma Benavides, M.S.W.
Graduate School of Social Work
University of Texas at Arlington
Box 19129
Arlington, Texas 76019
(817) 273-2972

This training program is a collaborative activity between Pan American University and UT Arlington to recruit B.S. level social work professionals of Hispanic Origin to the M.S.W. program at UT Arlington. The Department of Human Services in the Rio Grande Valley of South Texas and UT Arlington will provide stipend support for those social workers employed by DHS who enroll in the graduate program. The first year of the program includes courses offered at Pan American by visiting faculty from UT Arlington. Courses are to include rural Chicano content. Block placements will be taken in Arlington during the second year of the program. Bilingual support staff will be available at UT Arlington and Pan American to assist program applicants and participants. The program plans to offer orientation sessions for applicants, writing skills sessions, direct personal and emotional support, conference calls once a month, audio taping of all lectures and frequent communication with DHS to assure adequate time off and/or breaks for studying.

UT Arlington plans on recruiting 30 new students over a two year period and to graduate 80% of the students with an M.S.W. in 1992. The program will begin at Pan Amiercian University in the 1989-90 academic year.

**High School Outreach Center**

Target: High School Junior and Senior Students, Parents

Contact: Wright L. Lassiter, Jr. Ed.D., President
El Centro College of the Dallas County Community College District
Main and Lamar
Dallas, Texas 75202-3604
(214) 746-2010

This center is one of a series of aggressive efforts by this community college to increase the pool of Hispanic college applicants. The center is based in a predominantly Hispanic high school that is known to have the lowest percentage (25%) of graduating students attending college. The active participation of parents in the overall effort of encouraging college entry is an intervention strategy that high school officials and El Centro staff recognize as an important component to all recruitment and retention efforts. This involvement has included planned activities for parents on-site (high school) and at El Centro throughout the student's involvement in the center. The activities of the center include classes for advance placement in English and Math and counseling on how to prepare for college entrance exams. A practice test offers additional reinforcement and exposure to the college environment. Two to three career days are held during the school year on-site and at El Centro. Financial aid counseling is also offered. The college has future plans to explore offering dual-credit courses on-site. In addition, GED assistance and testing would be provided when applicable and requested.

An early initiative for El Centro was the formation of an Hispanic Advisory Council to the President. Drawn from public and private sectors, the Council advises the President on ways the College can be of greater service to the Hispanic community and actively engages in the recruitment of students and leadership talent for the College. The Outreach Center is only one activity that the Council has had a major part in.

Early statistics reported by Dr. Lassiter indicates that the average enrollment of Hispanic students over the last two academic years (1987-88 and 1988-89) increased from 7% to 11%. This increase is attributed to the aggressive effort by the College to reach the Hispanic citizenry within the district.

**The Options for Excellence Project**

Target: Middle and High School Students

Contact: Dan Beshara
The College Board
Suite 400
701 Brazos
Austin, Texas 78701-3232
(512) 472-0231

This project was developed in 1981 with funding from the Minnie Stevens Piper Foundation to increase the number of Hispanic students going to college. Its goal was twofold: to improve access to postsecondary education for all minority students in San Antonio area and to help participating schools develop and expand advanced placement courses for their most able students. Participating high schools also offered improved college guidance, placement in a college preparatory curriculum, test-taking strategies, and funding for students to take the PSAT exam. Documentation of the program's success can be found in improved college placement rates of participating high schools. While the original program, based in San Antonio, Texas, ended in 1984, having accomplished its goals, the advanced placement program continues to grow and expand in the 49 public and private high schools that participated in the project. In addition, the project has served as a model for subsequent projects in other metropolitan areas. For example, the Project Early Options (see description below) in Dallas, Texas is in it's third year of operation. Another spin-off project, in Albuquerque, New Mexico, was funded by the New Mexico Educational Assistance Foundation to improve access for minority students and readiness for college by helping the Albuquerque public schools establish and expand advance placement courses.

The College Board recently received a planning grant from the Aetna Foundation to field test a similar project in the District of Columbia and Fort Worth Independent School District's middle schools to help students and their parents think and plan for college-going opportunities. Questions regarding the program model and its' implementation/replication may be directed to Mr. Dan Beshara.

**Project Early Options**

Target: Middle and High School Students, Parents

Contact: Lynn Edward Ganze, Coordinator
Dallas Independent School District
3700 Ross Avenue, Box 141
Dallas, Texas 75204
(214) 824-1620, ext. 451

Funded by a Meadows Foundation grant and based on a model titled "The Options for Excellence Project", PEO focuses on expanding and enriching educational opportunities relative to the pursuit of higher education by students in the DISD. The objectives of the project are to increase student participation in college entrance examinations, to arrive at early identification of students possessing potential relative to advanced academic pursuits and to expand and enrich Advanced Placement course offerings. The project reaches primarily first generation students and minority students. The project provides a variety of opportunities for students and parents including cost-free preliminary SAT and NMSQT, pre-exam seminars after school or on Saturdays, pre-college planning seminars for middle school students and parents, early identification of students for entry into advanced placement courses, summer enrichment studies, summer school placement, and concurrent community college enrollment for enrichment or deficiency removal necessary for college enrollment.

**Hispanic Mother-Daughter Program**

Target: Eighth Grade Female Students and Mothers

Contact: JoAnne O"Donnell
Student Life Office
Student Services Bldg.
Arizona State University
Tempe, Arizona 85287-0512
(602) 965-6547

Developed in 1984 at Arizona State University, this career development program, prepares students for a successful university experience using a team approach that involves mothers directly in the educational process, along with a support network of school counselors, community leaders, and professionals who serve as role models. Campus visits and classroom exercises provide a flavor of university life, a better understanding of the expectations placed on college students, and the preparation necessary to succeed. Additionally, the program maintains contact with participants through high school and college. Since 1984, 185 students have participated in the program; 83 percent of these are still in high school, in contrast to the 40 percent to 60 percent national retention rate for Hispanics in high school.

More recent data indicates that a total of 243 teens have completed the 8th grade component of the program. In addition, at least 30 percent of the mothers have enrolled or continued in some form of education. Funding support comes from the University and AT&T Corporation.

**Mathematics, Engineering, Science Achievement (MESA)**

Target: High School Students, College Undergraduate Students

Contact: Fred Easter
University of California
Lawrence Hall of Science, Level D
Berkeley, California 94720
(415) 642-5064

MESA, established in 1970 in the state of California, is a partnership between schools and colleges with support from business and industry. MESA identifies students with interest and strength in mathematics and science and prepares them to enter and be successful in college. Tutoring, guidance, career counseling, and incentive awards encourage academic achievement. The program requires that students study college preparatory mathematics, science, and English; maintain an above average GPA; and participate in MESA student meetings, study and tutorial sessions, field trips, and the summer enrichment program.

MESA also has a university-level program called "Minority Engineering Program," which provides academic guidance and support for engineering and computer science students at seventeen California colleges and universities.

**Minority Programs**

Target: High School, College Undergraduate

Contact: Blanca Zaragoza, Director
Office of Special Programs
University of Texas Health Science Center-San Antonio
7703 Floyd Curl Drive, Rm. 358L
San Antonio, Texas 78284-7701
(512) 567-2654

The Office of Special Programs (OSP) at the University of Texas Health Science Center at San Antonio (UTHSCSA) provides support to under-represented minority students in a variety of ways. An Academic Support Network exists to provide tutoring, study groups, mentors (upperclassmen and faculty), academic and personal counseling at no cost, resource materials (such as old tests), minority student "buddy system", referrals and minority faculty speakers bureau. The OSP coordinates activities and provides clerical support to minority student organizations. Such organizations include the Texas Association of Mexican American Medical Students, the Student National Medical Association, the Diversified Dental Students (multi-cultural) and the Latin-American Nursing Student Association. Members from these organizations play a significant role in providing support to incoming students and in tutorial activities. Students are made aware of grants, scholarships, summer employment and enrichment programs, group functions, and minority student council activities through a monthly newsletter published by the OSP.

Minority student recruitment efforts are undertaken within each department of the health sciences center. Health Science center data indicate that 624 of the 2,219 total student enrollment in 1988-89, were minority students. In 1987-88, 549 of the 2,197 total student enrollment were minority students.

The OSP will be focusing on the issues of retention due to high rate of course repetition among minority students. The following minority programs are provided at UTHSCSA:

1) Medical College Admissions Test/Dental Admissions Test Performance Improvement Program. These have been funded since 1979 by the Division of Disadvantaged Assistance, Bureau of Health professions, Health Resources and Services Administration, Public Health Service. Undergraduate students (all levels) from St. Mary's University in San Antonio are provided with review courses in math, chemistry and physics and courses in critical analytical skills, writing and speed reading for six weeks during the summer. Summer preparation courses are offered to junior students who do not do well in the Spring MCAT/DAT. Students take the courses at St. Mary's and the UTHSCSA provides counseling, admissions information, panel discussion and tours. The program accepts fifty St. Mary's students and six students from other Texas undergraduate institutions every

year. All students receive a weekly stipend. Over the past eight years 65% of the participants have been admitted to a medical school and 80% to a dental school.

2) The National Institute of Health Minority High School Student Research Apprentice Program. This program was funded in 1983 by the Division of Research Resources, NIH. Each high school in the San Antonio area is invited to recommend two minority junior or senior students for the program. A total of six students are selected to spend 10 weeks working in a laboratory with a faculty member during the summer. All students receive $1500 during this period.

3) The Biomedical Program. This is an activity between UTHSCSA and the San Antonio School District. The program runs for 9 months and has no formal funding base or student stipends. Approximately 60 students ranging from grades 9 to 12 from the seven high schools in San Antonio are selected for this program. During the academic year they receive enrichment courses in the sciences and come to the UTHSCSA for lectures and demonstrations. Senior students work in the laboratory with a faculty member for four half-days a week. Two teachers from the school district are assigned to the program. Fifteen students have graduated from the program and all have enrolled in a university with at least one scholarship.

**Project 1000**

Target: College Undergraduate

Contact: Gary D. Keller, Executive Director
c/o Graduate College
Arizona State University
Tempe, Arizona 85287
(602) 965-3958

Headquartered at Arizona State university, Project 1000 is a recently funded national clearinghouse for U.S. Hispanic undergraduate students who want to apply to graduate school. The Project seeks to identify, recruit, admit, and graduate an additional 1,000 U.S. Hispanic graduate students over a three-year period. Other goals include: to test the use of alternative and supplemental aptitude measures to admit U.S. Hispanic students to selective graduate programs, to graduate a significant number of students from prestigious graduate programs, especially in under-represented areas of graduate study; to encourage cooperation among selective graduate schools, undergraduate institutions, professional associations, community-based Hispanic organizations and corporations; to track the academic progress of program participants; and to establish a model for increasing access into graduate and professional programs at other institutions and for additional minority groups.

x

**Project STEP (The Student/Teacher Educational Partnership)**

Target: High School Students

Contact: Manuel Gomez
University of California in Irvine
Education Opportunity Program
152 Administration Building
Irvine, California 92717
(714) 856-5410

Project STEP is a nationally recognized model of intersegmental collaboration to improve the preparation of high school students for postsecondary education. Headquartered at the University of California at Irvine, STEP undertakes a number of joint activities with California State University in Fullerton, Chapman College, and Rancho Santiago Junior College to support teachers, counselors, administrators, students and parents of targeted junior high and high schools in the Santa Ana Unified School District. The STEP Administrative Council, comprised of a representative from each of the institutions, has been crucial in sustaining ongoing cooperation among and between partner institutions.

STEP addresses curriculum review, faculty in-service, and student academic support and guidance needs in order to promote academic excellence and equality. The primary emphasis is to teach higher-order thinking skills-comprehension, critical analysis, synthesis, evaluation, and application-in math, science, reading, and writing. The project also includes academic counseling, tutorial services, and parental involvement. The success of the program can be measured in the increase in the number of college preparatory courses in participating high schools, in the significant increase in the numbers of students taking college entrance exams, and in the steadily increasing college-going rates. Also significant has been the effort to reconstruct the relationship between the public secondary schools and institutions of higher education. The collegiality between high school teachers and college faculty has broken the isolation of the classroom teachers and has had a powerful impact on the high school curriculum.

**Project Teacher Excellence II**

Target: High School Students

Contact: Cindy D. Soto, Ph.D.
Our Lady of the Lake University
411 S.W. 24th Street
San Antonio, Texas 78285
(512) 434-6711, ext. 398

The educational program is based on an earlier PTE program funded in 1967 which was a four year teacher training program for the preparation of bicultural and bilingual elementary teachers. The original project focused on young Hispanics who had limited opportunities in education and who agreed to practice in their communities as teachers for five years in exchange for the education they received. Of 34 initial participants, all but three completed their bachelor's degrees and 16 have continued their educations to earn graduate degrees.

The purpose of PTE II is to identify high school seniors who have demonstrated leadership roles and potential for college study and high school freshmen who can be encouraged to consider a teaching career. The focus of the program is teacher recruitment and retention. Eleven public high schools and three private schools in the San Antonio area have been targeted for these recruitment efforts. Special student support services include tutoring, study skills classes for required state exams for teacher candidates, group meetings and summer employment. Each student is also assigned to a mentor within the Mentors for Academic Success Project (MAS) which is University supported. Students are tracked throughout the college years to graduation. Students selected to participate in PTE II receive financial aid according to need of the individual students.

PTE II was one of 11 projects funded by the Texas Education Agency aimed at the recruitment and retention of promising teacher education candidates. The project was funded from may 1988 to June 1989 and is seeking future funding support from the university.

**Strengthening the Talent Pool in Teacher Education Project**

Target: High School Students, College Undergraduate Students, Individuals Eligible for Teacher Certification

Contact: Leslie Huling-Austin, Ed.D.
Southwest Texas State University
Education Bldg. 3046
San Marcos, Texas 78666
(512) 245-2039

The project was jointly proposed by the Southwest School of Education, the national office of the League of United Latin American Citizens (LULAC), and the Southwest Texas Teacher Center. This project is one of 11 Texas Education Agency funded projects in Texas. The project consists of three primary components: 1) Recruitment, 2) Remediation, and 3) Network.

The recruitment component includes activities targeting public school students, community college and university students, and persons already holding degrees who might be interested in returning for teacher certification. The remediation and retention component identifies at-risk students early in their undergraduate careers to provide them with intensive, on-going assistance through their college program. Activities include adjunct courses, remedial courses in mathematics and English/language arts, and preparation classes for exams required for admission to teacher education. The network component will involve a variety of activities, including a semi-annual newsletter (The Recruitment and Retention Reporter) designed to promote communication and collaboration among and between individuals and institutions striving to recruit and retain promising candidates in teacher education. The network is supported by the national LULAC office and private sector donors. LULAC, the nations's largest Hispanic organization, has pledged a matching funds contribution to support broad-scale efforts to recruit promising students into teacher education, with a special emphasis on Hispanic and other minority candidates. LULAC is committed to this effort and believes that by increasing both the quality of the teaching force and number of minority teachers in public schools, student drop-out rates will decrease. The project is expected to conclude its work in the Summer of 1989.

**The San Antonio Prefreshman Engineering Program (PREP)**

Target: Middle School and High School Students

Contact: Manuel P. Berriozabal, Ph.D.
PREP Office
University of Texas in San Antonio
San Antonio, Texas 78285
(512) 691-5530

Since 1979, the University of Texas at San Antonio has conducted PREP to identify high ability middle school and high school students and give them the necessary academic and motivational reinforcement to pursue engineering and science studies in college. Students may enroll in the program as early as the 6th grade and 68 percent of those enrolled are middle-school students. Program support for PREP includes financial and full time, in-kind manpower support from local, state, and national colleges and universities, the air force and navy, as well as other governmental agencies, private industry, professional organizations, and local school districts.

An eight-week summer program is hosted by several Texas public colleges and universities (TEX-PREP). Currently, there are 8 cities in Texas that offer PREP and 4 more locations will begin the program in the near future. Classes develop abstract reasoning and problem solving skills and identify career opportunities in engineering and science. Since its inception, 1,741 students have successfully completed at least one summer of PREP. Seventy-eight percent have been minorities and 49 percent have been women. In the 1987 annual follow-up of previous program participants, 88 percent were college students or college graduates, and 67 percent were majoring in science or engineering.

**The University of California Partnership Programs**

Target: Junior High and High School Students

Contact: Ed Apodaca
Partnerships Program
2515 Hillegass
University of California
Berkeley, California 94720
(415) 642-5860

The University of California offers Junior High and School Partnership Programs at each of its campuses. Between 1980 and 1987, the program has doubled the numbers of Chicano students entering the University of California. The goal of this state-funded early outreach effort is to increase the pool of college-eligible under-represented minority students. Each campus offers a different program that includes academic advising, parental outreach, positive role models, and academic enrichment through classes or tutoring and campus-based Saturday and summer programs.

ORGANIZATION PROGRAMS

**Aspira Association, Inc.**

Target: High School, College Undergraduate

Contact: Hilda Crespo
Director of Education
ASPIRA Association, Inc. National Office
1112 16th Street, NW
Suite 340
Washington, D.C. 20036
(202) 835-3600

ASPIRA is a national organization dedicated to encouraging and promoting education and leadership development among young Hispanics. In addition, ASPIRA strives to increase access of Hispanic youth to quality education and leadership training through research, pilot programs, and related advocacy projects.

The ASPIRA National Health Careers Program addresses the need in the Hispanic community for medical and health care practitioners who are familiar with the culture and language of those requiring medical assistance. The primary objective of the program is to increase the number of Hispanic and other under-represented groups entering and graduating from medical and health professions schools and to encourage them to return and contribute their skills to the service of their communities.

Comprehensive support services are provided to program participants and include outreach recruitment activities, counseling services, educational placement in postsecondary and health professions schools, financial aid information, workshops on career choice and application process, review sessions for college entrance exams, exposure to health professions school conferences, and support services geared to retention of students in school. In addition, the program offers workshops on securing financial aid and improving interview skills, trips to colleges and health institutions, an linkages with health institutions and key professionals.

The ASPIRA association has established a Health Careers Program in each of its six Associate offices located in Miami, Florida; Chicago, Illinois; Newark, New Jersey; New York City; Philadelphia, Pennsylvania; and Carolina, Puerto Rico. The national office is in Washington, D.C.

**The Center for Health Policy Development (CHPD)**

Target: Middle and High School Students, College Undergraduate

Contact: Juan Flores, Executive Director
Center for Health Policy Development
2300 W. Commerce, Suite 304
San Antonio, Texas 78207
(512) 226-9743

The CHPD has been in operation for 10 years and is funded to address various health issues in the Hispanic community. The major activities of the CHPD are the Health Careers Institute (HCI), Health Prevention/Promotion, and the Hispanic Leadership Institute (training in policy making). Although CHPD has a state-wide network, the primary activities are in South Texas and El Paso with some field work in Dallas.

The major goal of the HCI program services is to increase the pool of Hispanic applicants to health career professions. These services include information services, structured career development activities, direct financial aid and structured academic enrichment. Membership in the HCI begins in middle and high school and continues through college. The HCI recruitment efforts include ongoing counseling, advising and networking during the students HCI membership.

The following services are important components to the HCI recruitment process:

1) Information Services. CHPD has found that one of the major reasons Hispanic students do not seek health careers is that they don't get the information. Two newsletters have been developed to meet this problem. ADELANTE! targets the high school student and NUESTRO BIEN ESTAR targets the college student. These newsletters provide students with information related to professional careers (feature articles written by hispanic health careers professionals), HCI activities, financial aid, etc. Other methods designed to disseminate information include classroom presentation by medical professionals within high school settings and workshops at the college level. Health fairs involving health professions schools within colleges and universities and health professions manual serve in getting the information out to the students.

A critical factor affecting a student's application to college is financial commitment. The HCI has developed a Financial Aid System (FAIS) that indexes financial aid programs by categories. FAIS also includes descriptive information on deadlines, contacts, and repayment information. The system allows a pro-active approach to meeting the financial needs of students.

2) Direct Financial Aid. The HCI provides limited direct financial aid ($5000) to students who demonstrate potential in a given area or professional track. Some funds are available to provide emergency loans to allow students to travel to colleges for interviews.

3) Structured Career Development Activity. The Med-Prep program targets all health professions and enrolls 35 students per semester. This is a collaborative activity between UT Health Sciences Center-San Antonio and six area high schools. The goal of the program is to increase the number and caliber of Hispanic high school students that graduate, enter college, and become health care professionals. Funding ($22,000) is provided by the San Antonio's Mexican American Physicians Association (MAPA) and the CHPD. Students are tracked to determine how many apply to college and how many graduate. MAPA was very instrumental in the legislative action involving the acceptance of the MED-PREP program by the Texas Coordinating Board for Higher Education (Senate Bill no. 457). The HCI is continuing to develop pilot projects addressing structured activities involving role modeling and volunteer projects that will expose students to health professionals and the health environment.

4) Structured Academic Enrichment. A 6 week summer enrichment program through a junior college is offered to pre-nursing students who have committed to enter college in the fall. The program offers additional help in remedial reading, career exposure and personal development. Enrollment is 40 per class and funding is shared between San Antonio Junior College and HCI.

College enrollment is a major indication for success of the HCI's activities. The network system allows the program to track students through the college years.

The CHPD has identified a need for more collaboration between universities and high schools in recruitment efforts. Medical schools are not being proactive in their minority recruitment efforts. It is necessary to look at Hispanic college student enrollment data with a critical eye in order to differentiate between the foreign and US citizen. Current data from CHPD indicates that of the 2000 physicians in Texas, 400 are Hispanic and only 100 are US trained.

**Hispanic Association of Colleges and Universities (HACU)**

Target: College and University Students

Contact: Antonio Rigual or Cesar Mario Trimble
Our Lady of the Lake University
411 S.W. 24th St.
San Antonio, Texas 78285
(512) 433-1501

A significant new development for Hispanics in higher education is the establishment of HACU in San Antonio, Texas. HACU is a national association of postsecondary institutions charged with promoting educational opportunities for Hispanics at colleges and universities with significant Hispanic enrollments. Though relatively young, the association offers much promise for the growth and strengthening of colleges and universities serving Hispanic students.

The association has received funding from the Pew Charitable Trusts for the "Hispanic Student Success Program" (HSSP). This project will identify talented students in four predominantly Hispanic school districts and prepare them for college. Four superintendents have joined this cooperative effort, and staff are in the process of being hired. This project is significant in that HACU hopes to build an experience base in these four school systems that can be expanded to other predominantly Hispanic school districts across the country.

The association also promotes research on Hispanic student needs in order to develop more efficient early outreach college information efforts and more effective retention strategies and also has established partnerships between member institutions and businesses, governmental agencies, and other interested parties. HACU provides students with strong academic programs, culturally sensitive developmental studies and support services, attractive financial aid packages, and Hispanic faculty to serve as role models. HACU also undertakes a number of joint planning and resource development activities and has established a shared pool of resources and information and faculty development programs in corporate and industrial settings.

**National Council of La Raza**

Target: Hispanic children, youth, parents and teachers

Contact: Lori Orum
20 F Street, N.W.
Washington, D.C. 20001
(202) 628-9600

This national policy analysis and technical assistance organization is working to improve Hispanic educational outcomes through its innovative education program. The program has developed five models that communities can use to work with Hispanic children, youth, parents, and teachers. The models - Academia del Pueblo, Project Success, Project Second Chance, Parents as Partners, and the Teachers Support Network - are being demonstrated by council affiliates and evaluated by La Raza. The projects place strong emphasis on reading, math and science skills, and awareness of careers that require higher education. Local projects are primarily supported by corporate and foundation grants and are designed to be low cost and replicable.

**Texas Health Careers**

Target: High School Students, College Undergraduates

Contact: Mike Garcia, Director
Texas Health Careers
Texas Hospital Education and Research Foundation
P.O. Box 15587
Austin, Texas 78761-5587
1-800-252-9708

The Health Careers program has been in existence since 1964 and is dedicated to solving the health manpower shortage through career information and educational services. The program includes career counseling and placement services, campus programming, and a network of student-assistance and educational activities, available free of charge to interested Texas. The program has developed bilingual public service announcements in an effort to recruit Hispanic individuals to the health care professions. Those responding to the PSA call a toll free number and are given the name of a recruiter in their area who provides them with further information. Public awareness campaigns are ongoing and focus on specific health careers (Allied Health, Dentistry, Therapy careers). The Texas Hospital Education and Research Foundation is an affiliate of the Texas Hospital Association.

SPEECH LANGUAGE PATHOLOGY AND AUDIOLOGY PROGRAMS
WITH
BILINGUAL EMPHASIS*

*SOURCE: American Speech-Language-Hearing Association

SPEECH LANGUAGE PATHOLOGY AND AUDIOLOGY PROGRAMS
WITH
BILINGUAL EMPHASIS

University of Arizona
American Indian Professional Training
in Speech Pathology & Audiology
Department of Speech and Hearing Sciences
Tucson, Arizona 85721
Contact: Robin Dilworth
(602) 621-1644

This model training program, committed to the professional preparation of bilingual/bicultural American Indians in the field of speech-language pathology and audiology, was established in 1979. the program provides direct student support, academic/tutorial support, and an opportunity for reservation practicum experience. Graduates of the program are providing services to communicatively impaired native Americans on reservations.

Colorado State University
Colorado Hispanic Initiative Program
Department of Communication Disorders
138 Humanities Building
Fort Collins, Colorado 80523
Contact Kathy Rupp
(303) 491-6981

The program offers both a multicultural track, designed to provide master's level speech-language pathologist and audiologists with specialized skills in the area of multicultural communication disorders, and a traditional track. Students in the traditional track will receive basic information concerning communication disorders in multicultural populations. The multicultural track is designed to provide greater breadth and depth of education focused on multicultural groups, especially the Hispanic population. Academic preparation stresses theories and principles of communication development, disorders, diagnosis, and treatment as they apply to various milticultural and/or bilingual populations. Practica in this track are designed to provide experience with communication disorders in multicultural populations. The multicultural track offers academic and interpersonal support. Inquiries regarding financial support are welcome.

PanAmerican University
Speech and Hearing Center
Communications Department
1201 W. University Drive
Edinburg, Texas 78539
Contact: Luciano Valles, Jr.
(512) 381-3587

Source: American Speech Language Hearing Association

The program offers two master's degrees, one traditional and one in bilingual communication disorders. Initiated by a grant from the Office of Personnel Preparation in 1983, it is now funded by the University. There is strong emphasis on research of bilingual-bicultural Spanish-speaking individuals.

University of Puerto Rico
Medical Sciences Campus
College of Health Related Professions
Department of Communicological Disorders
G.P.O. box 5067
San Juan, Puerto Rico 00936
Contact: Ana M. Gonzalez
(809) 767-9626

Classes are conducted in Spanish. Both Spanish-speaking and English-speaking populations with communication disorders are served within the clinical program. Emphasis is placed in the area of bilingualism and biculturalism. Research is conducted mainly in the areas of language development and language disorders of Spanish speakers.

San Diego State University
Professional Services bilingual/Multicultural
Certificate in Communicative Disorders
Bilingual Program in Speech-Language Pathology
Department of Communicative Disorders
College of Human Services
San Diego, California 92182
Contact: Li-Rong Lilly Cheng
(619) 229-2460

Program leads to bachelor's and master's degrees in speech-language pathology and is for Spanish-speaking students, Mandarin and Cantonese-speaking students, graduate students in speech-language is specific to language development and disabilities in bilingual/multicultural population. Stipends are available to upper division undergraduate and graduate students.

San Jose University
Center for Communication Disorders
Division of Special Education &
Rehabilitation Services
San Jose, California 95152
Contact: Gloria Weddington
(408) 277-2651

Bilingual Emphasis: Spanish, Filipino, Vietnamese, and Portuguese. The graduate program in communication disorders offers a concentration in bilingual/bicultural aspects of speech-language pathology and audiology. In addition to a master's degree, a certificate from the School of

Education is awarded upon completion of the program. Program in Communication Disorders and Sciences offers a bilingual speech-language pathology clinic; most clients speak Spanish but growing Asian and other minority populations in the region have created an immense need for professionals with good bilingual and assessment skills. Students from diverse ethnic backgrounds are actively sought. The program has an exchange program with the University of the Americas in Mexico.

Temple University
Hispanic Emphasis Program
Speech-language-Hearing 265-65
Philadelphia, PA 19122
Contact: Aquiles Iglesias
(215) 787-7543

Established in 1980, this program offers a master's and doctorate degree, both with Hispanic emphasis. The program offers the only doctorate with a Hispanic emphasis. Funded by the Office of Personnel Preparation, the program has a strong emphasis in research at both levels.

University of Texas at Austin
Bilingual Speech Pathology Project
Program in Communication Disorders
Department of Speech Communication
Austin, Texas 78712
Contact: Barbara Loera
(512) 471-4119

Department of Speech Communication Program in Communication Disorders at the University of Texas at Austin offers a specialized training sequence to graduate students majoring in speech-language pathology. This program provides specialized academic and clinical training for the emerging field of bilingual speech-language pathology. There is a critical need at the state and national level for well-trained professionals of this type particularly with bilingual capabilities. Students in this program learn (1) the description and understanding of speech-language characteristics of Spanish and second language acquisition; (2) the principles and techniques for identification, evaluation and management of communication disorders in bilingual populations; and (3) the development of consultative skills for providing information to other professionals, thus increasing expertise and resources available to serve the bilingual populations.

Texas Christian University
Graduate Studies in Bilingual
Communication Pathology
Miller Speech and Hearing Clinic
P.O. Box 30793
Fort Worth, Texas 76129
Contact: Hortencia Kayser
(817) 921-7620

This is a sequence of academic and clinical laboratory experiences with specific focus on the bilingual (Hispanic) client. Monolingual and bilingual students are accepted into this bilingual emphasis program. Full funding is available for qualified applicants.

# APPENDIX C

## HISPANIC HIGHER EDUCATION ASSOCIATIONS AND RELATED ORGANIZATIONS* **

**American Association of Higher Education Caucus**

Chair: Sarita Brown, Assistant Dean
Office of Graduate Studies
University of Texas at Austin
Austin, TX 78712
512/471-7151

**Arizona Association of Chicanos in Higher Education (AACHE)**

President: Dr. Celestino Fernandez
Administration Building 501
University of Arizona
Tucson, AZ 85721
602/621=3318

**ASPIRA Association, Inc.**

Executive Director: Dr. Janice Petrovich
1112 16th Street, N.W., Suite 340
Washington, DC 20036
202/835-3600

**Caribbean Association of Trio Program (CATP)-Puerto Rico and Virgin Islands**

President: Dr. Ana Maria Torres
Special Services Program
Catholic University of Puerto Rico
Box 599 Station 6
Ponce, Puerto Rico 00732
809/844-4150 ext. 140 or 141

**Colorado Association of Chicanos in Higher Education (CACHE)**

Chair: George Autobee
Director, Affirmative Action
University of Colorado at Denver
1200 Larimer Street
Campus Box 154
Denver, CO 80202
303/556-2509

* Source: ASPIRA
** Contact organizations for possible scholarship funds.

**Connecticut Association of Latin Americans in Higher Education, Inc. (CALAHE)**
P.O. Box 1484
Hartford, CT 06101

President: Yvette Melendez Thiesfield
State Department of Education
P.O. Box 2219
Room 322
Hartford, CT 06145
203/566-3851

**Consortium for Graduate Study in Management**

Executive Director: Wallace L. Jones
One Brookings Drive
Campus Box 1132
St. Louis, MO 63130
314/889-6353

**Corporate Executive Fellows Program (CEF)**

Director: George A. Pena
c/o National Urban Fellows, Inc.
570 Seventh Ave., Suite 905
New York, NY 10018
212/221-7090

**Council on Higher Education**
**Commonwealth of Puerto Rico**

Executive Director: Ismael Ramirez
Box F
UPR Station
Rio Piedras, Puerto Rico 00931
809/758-3350

**Educational Issues Network (EIN)**

Director: Dr. Monte Perez
Educational Testing Service
2 North Lake Avenue, Suite 510
Pasadena, CA 91101
818/578-1971

**Hispanic Association of Colleges and Universities (HACU)**

Executive Director: Dr. Antonio Rigual
411 S.W. 24th Street
San Antonio, TX 78285
512/433-1501

**Hispanic Association of Higher Education (HAHE) of New Jersey**
106 Halsey Street
Newark, NJ 07102

Chair: Dr. Elsa Nunez-Wormack
College of Staten Island/CUNY
715 Ocean Terrace
Staten Island, NY 10301
718/390-7666

**Hispanic Association of Higher Education (HAHE) of New York**
P.O. Box 88
Church Street Station
New York, NY 10008

Chair: Dr. Heriberto Dixon
Graduate School, Management & Urban Professions
New School for Social Research
65 Fifth Avenue
New York, NY 10003

**INROADS, Inc.**

President and CEO: Reginald D. Dickson
1221 Locust Street, Suite 410
St. Louis, MO 63103
314/241-7330

**Leadership Education and Development Program in Business (LEAD)**

Executive Vice President/National Director: William J. Elliot
37 Nishuane Road
Montclair, NJ 07042
201/783-6486 or 212/907-4452, 4424

**League of United Latin American Citizens (LULAC)**

Executive Director: Jose Longoria
National Educational Service Centers, Inc.
400 First Street, N.W., Suite 716
Washington, DC 20001

**National Association for Chicano Studies (NACS)**

General Coordinator: Dr. Tacho Mindiola
Chairman, Mexican American Studies Program
University of Houston
612 Agnes Arnold Hall
Houston, TX 77004
713/749-7386

**National Association of Hispanic Professors of Business and Economics**

President: Luis Aranda
c/o College of Business
Arizona State University
Tempe, AZ 85287
602/965-4289

**National Association of Minorities with Doctorate Degrees**

Executive Director: Betty Jean Jackson-Park, Ph.D.
2301 Halcyon Avenue
Baltimore, MD 21214
301/254-4786

**National Chicano Council on Higher Education (NCCHE)**

President: Dr. Arturo Madrid
710 North College Avenue
Claremont, CA 91711
714/625-6607

**National Coalition of Hispanic Health and Human Services Organizations (COSSMHO)**

President: Jane L. Delgado, Ph.D.
1030 15th Street, N.W., Suite 1053
Washington, DC 20005
202/371-2100

**National Community College Hispanic Council**

President: Dr. Eduardo J. Padron
President, New World Center Campus
Miami-Dade Community College
300 N.E. Second Avenue
Miami, FL 33132
305/347-3393

**National Council of La Raza**

President: Raul Yzaguirre
20 F. Street, N.W.
Washington, DC 20001
202/628-9600

**National Hispanic Scholarship Fund**

Executive Director: Ernest Z. Robles
P.O. Box 748
San Francisco, CA 94101
415/892-9971

**National Network of Hispanic Women**

Chair: Celia Torres
12021 Wilshire Boulevard, Suite 353
Los Angeles, CA 90025
213/938-6176

**National Society of Hispanic MBAs**

President: Henry Hernandez
c/o Graduate Management Admission Council
11601 Wilshire Boulevard, Suite 1060
Los Angeles, CA 90025
213/478-1433

**Project 1000**

Executive Director: Gary D. Keller
c/o Graduate College
Arizona State University
Tempe, AZ 85287
800/327-4893
602/965-3958

**Puerto Rican Council on Higher Education (PRCHE)**
P.O. Box 7471
F.D.R. Station
New York, NY 10150

Carlos Rodriguez
c/o Centro de Estudios Puertoriquenos
Hunter College, CUNY
695 Park Avenue
New York, NY 10021
212/772-5689

**Raza Advocates for California Higher Education (RACHE)**

President: Dennis Lopez
Intersegmental Coordinating Council
515 L Street, Room 501
Sacramento, CA 95814
916/327-1822

**Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)**

Chair: Dr. Frank Talamantes
Thimann Labs
University of California, Santa Cruz
Santa Cruz, CA 95064
408/429-2295

**Texas Association of Chicanos in Higher Education (TACHE)**

President: Dr. Ramon Dovalina
Vice President, Austin Community College
P.O. Box 140526
Austin, TX 78714
512/483-7000

**Wisconsin Hispanic Council on Higher Education (WHCHE)**

President: Marta Llamelas
Milwaukee Public Schools
2314 W. Manchester Avenue
Milwaukee, WI 53221
414/281-8932